

CLAIMS

1 A method for recovering a polypeptide comprising:

5 (a) exposing a composition comprising a polypeptide to a reagent which binds to, or modifies, the polypeptide, wherein the reagent is immobilized on a solid phase; and then

(b) passing the composition through a filter bearing a charge which is opposite to the charge of the reagent in the composition, so as to remove leached reagent from the composition.

10 2. The method of claim 1 wherein the charge characteristics of the polypeptide in the composition in step (b) are such that the polypeptide passes through the filter.

3. The method of claim 1 wherein the filter is positively charged.

4. The method of claim 1 wherein the filter is negatively charged.

5. The method of claim 1 wherein the filter is placed in line with the composition exposed to the reagent as in step (a).

6. The method of claim 1 wherein the immobilized reagent is a protease.

7. The method of claim 6 wherein the protease is pepsin.

8. The method of claim 6 wherein the polypeptide exposed to the protease in step (a) is a precursor polypeptide and the protease removes a precursor domain from the polypeptide.

9. The method of claim 8 wherein the precursor domain comprises a leucine zipper.

10. The method of claim 9 wherein the polypeptide is an antibody.

11. The method of claim 10 wherein the antibody is a F(ab')₂ fragment.

12. A method for recovering a polypeptide comprising removing a leached reagent from a composition comprising the polypeptide and the leached reagent by passing the composition through a filter bearing a charge opposite to that of the leached reagent, wherein the leached reagent was previously immobilized on a solid phase.

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13. A method for modifying a precursor antibody comprising a leucine zipper comprising exposing the precursor antibody to a protease immobilized on a solid phase such that the protease removes the leucine zipper from the precursor antibody.
14. The method of claim 13 further comprising passing the antibody from which the leucine zipper has been removed through a positively charged filter.
15. The method of claim 13 wherein the protease is pepsin.
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16. The method of claim 13 wherein the solid phase comprises controlled pore glass beads.
17. The method of claim 13 wherein the antibody is a $F(ab')_2$.
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18. The method of claim 13 wherein the leucine zipper is GCN4.
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19. The method of claim 13 wherein the antibody binds CD18.